

## Graphene Batteries Could Soon Replace Lithium-ion Ones

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The traditional lithium-ion battery could soon be replaced in electric cars by a new generation made from graphene. This material has many qualities. In particular, it should allow the battery to be recharged much more rapidly than today.

Graphene is extracted from graphite, itself derived from carbon. This material has been studied for its potential use in the composition of new batteries for several years.

The main advantage of graphene is that it is faster to recharge than lithium-ion.

Graphene is also more resistant and less subject to wear. In fact, its lifespan should be longer and therefore require fewer battery changes.

Finally, graphene-based batteries are safer than lithium-ion batteries, which in extreme cases have already ignited and even exploded.

The main disadvantage of using graphene today is its cost, which is so high that it is often referred to as 'black gold.'

If, however, the production of graphene batteries begins on a large scale, these costs would drop dramatically.

Chinese automaker GAC will be the first to market a model equipped with this new type of battery, integrated into its new all-electric SUV, the Aion V, which is scheduled to go into production in September 2021.

GAC has announced that this new battery will be able to recharge to 80% in only eight minutes.

This type of battery could also soon be present in our smartphones, whose complete recharges could then be guaranteed in less than five minutes. Xiaomi and Huawei are already at work on the question.

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